BOOK REVIEW

WEBERKNECHTE, OPILIONES. Vol. 64 in *Die Tierwelt Deutschlands*. Gustav Fischer, Jena. 464 pp., 815 figs. 1978.

The publication of this important volume is a benchmark in the history of our knowledge of the Opiliones, that little-studied (and consequently poorly understood) order of Arachnida. Among previously published works of similar ambition, only Bishop's brief "Phalangida of New York" and Šilhavý's volume in Fauna ČSR compare favorably. Central Europe has become, at this one stroke, the best-known region in the world as regards its opilionid fauna. Martens draws heavily on his own work and that of his colleagues Šilhavý, Gruber, Ausobsky, Staręga, Thaler, and others, to bring together practically all that is known about the Central European opilionid fauna. In even a comparatively well-collected region as the Northeastern United States, new species and genera are still being found, perhaps suggesting how long it will be before something similar to Martens' book can be prepared for North America.

Comparison may be invited with Roewer's 1923 book, "Die Weberknechte der Erde," but none can be made. Roewer's volume was merely a compendium from the literature of all names published in Opiliones as of 1923; Roewer frequently did not examine material of the species he discussed, included virtually no ecological, behavioral or physiological information, and was an inveterate "splitter," resulting in the Opiliones being held up by Mayr (1969) as an example of an exceptionally fractionated group, with 1700 species in 500 genera, more than 300 of which were montypic. Indeed, Roewer sometimes placed males and females of the same species in different genera. Thus, despite its attempt at scope, his treatise is of limited value and serves mainly as a guide to the older literature.

Martens' book, however, includes available ecological and behavioral information for each species discussed, in addition to an introductory chapter dealing with such considerations for the order as a whole. By narrowing his focus geographically, Martens is able to deal much more deeply with each species he treats.

The illustrations (which are profuse) are excellently executed, but the printing process typical of *Tierwelt*, together with the inexpensive grade of paper used, has resulted in the fine detail of some of them being obscured or even lost (see especially figs. 403-405 and figs. 284 and 287). Too great a degree of reduction in drawings already quite dark (figs. 158, 166, 173, etc.) has made them virtually solid black. This is unfortunate, but since these illustrations are in some cases the only ones available, their publication is welcome.

A number of nomenclatorial questions also arise. There is a repeated (p. 54, 186, 187) casual mention of a monotypic family Crosbycidae for the North American *Crosbycus*. It is difficult to know whether or not this constitutes a valid proposal for such a family. Martens also recognizes Sabaconidae as a separate family, but does not deal with the position of *Tomicomerus*.

On the other hand, his clear exposition of the Family Phalangiidae greatly improves our understanding of this group. This is a real trouble spot in opilionid taxonomy. Martens for the first time lays out the issues; it is very difficult to distinguish between Leiobuninae, Gyantinae and Gagrellinae as presently constituted. Similarly, in the subfamily Oligolophinae, the generic complex Oligolophus—Paroligolophus presents difficulties, as does the complex Odiellus—Lacinius.

From the standpoint of the American opilionologist, this work will be invaluable for two reasons. First, a number of the genera found in North America of which we have an

incomplete understanding have as their types European forms; Martens presents detailed descriptions and good illustrations of some of these. Secondly, numerous European species are being discovered (even in recent years; see Muchmore, 1963; Bell, 1974; Bragg and Holmberg, 1975) as introduced to the United States and Canada; with Martens' book on hand, we can avoid falling into the error of thinking these new.

In summary, this volume may be heartily recommended for inclusion in the library of every serious arachnologist.

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